

Claims:

1. A controlled release pharmaceutical formulation, comprising:

an effective amount of L-threo-DOPS, a derivative thereof, or a pharmaceutically-acceptable salt thereof, in an extended release form.

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2. A controlled release pharmaceutical formulation of claim 1, wherein the extended release form is a dissolution controlled release delivery system.

10 3. A controlled release pharmaceutical formulation of claim 2, wherein the dissolution controlled release delivery system is oral and comprises a slowly soluble material which is selected from the group consisting of: ethylcellulose, cellulose acetate phthalate, acrylic resins, methacrylate hydrogels, methylmethacrylate, polymethacrylate, polylactic acid, polyvinyl chloride, polyvinyl chloride, polymethacrylate, hydroxypropylmethylcellulose, polyethylene glycols, carboxymethylcellulose, and 15 sodium carboxymethylcellulose.

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4. A controlled release pharmaceutical formulation of claim 1, wherein

the controlled release formulation is non-oral and maintains the release of L-threo-DOPS, a derivative thereof, or salt thereof, over a period of at least 24 hours.

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5. The controlled release pharmaceutical formulation of claim 1, wherein the controlled release formulation is oral and suitable for once-daily administration.

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6. The controlled release pharmaceutical formulation of claim 1, wherein the controlled release formulation is oral and suitable for twice- or three-times daily administration.

7. A controlled release pharmaceutical formulation of claim 1, further comprising an effective amount of L-threo-DOPS, a derivative thereof, or a pharmaceutically-acceptable salt thereof, in an immediate release form.

8. A controlled release pharmaceutical formulation of claim 7, wherein the formulation comprises 45-85% by weight of total active drug of L-threo-DOPS in extended release form and 15-55% by weight of total active drug of L-threo-DOPS in immediate release form.

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9. A controlled release pharmaceutical composition of claim 1 which is for oral use.

10. A controlled release pharmaceutical composition of claim 1, further comprising a pharmaceutically-acceptable carrier.

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